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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,446	12/26/2001	Rick K. Southern	104981-4000	1727
28765 WINSTON & S	7590 03/02/2007 STRAWN LLP		EXAM	IINER
PATENT DEP.			A, PHI DIEU TRAN	
1700 K STREE WASHINGTO	•		ART UNIT	PAPER NUMBER
			3637	
SHORTENED STATUTOR	LY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	03/02/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

.,		Application No.	Applicant(s)				
		. 10/034,446	SOUTHERN ET AL.				
Office Action Summary		Examiner	Art Unit				
		Phi D. A	3637				
Daried fo	The MAILING DATE of this communication ap	pears on the cover sheet w	vith the correspondence address	•			
Period fo							
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. by cellon of the provision of the period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailin ed patent term adjustment. See 37 CFR 1.704(b).	NATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MC e. cause the application to become A	ICATION. Treply be timely filed INTHS from the mailing date of this communicat	·			
Status		•					
1)⊠	Responsive to communication(s) filed on <u>01 J</u>	une 2006.		•			
2a)□	i	s action is non-final.					
3)	Since this application is in condition for allowa		tters, prosecution as to the merits	is			
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposit	ion of Claims	`					
4)⊠	Claim(s) <u>1-3,5-7,10,12 and 14-20</u> is/are pendi	ng in the application.	•	•			
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
6)⊠	Claim(s) 1-3,5-7,10,12 and 14-20 is/are rejected.						
7)	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction and/or election requirement.						
Applicat	ion Papers	• .					
9)[The specification is objected to by the Examine	er.					
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the E	xaminer. Note the attache	ed Office Action or form PTO-152.	•			
Priority (under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreigr ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	,			
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the prior		n received in this National Stage				
• .	application from the International Burea	• • • • • • • • • • • • • • • • • • • •		•			
* \$	See the attached detailed Office action for a list	of the certified copies no	t received.				
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Attachmen		,, <u> </u>	0 (DTG ///)				
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Paper No	Summary (PTO-413) (s)/Mail Date				
	mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date		Informal Patent Application —				

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Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification is enabled for the adhesive having diisocyanate, not isocyanate.

Applicant's specification page 1 lines 18-24 does not support the adhesive being isocyanate, the rejection is thus repeated above.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art ar e such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 10, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong (NPL), Murray, and Searer (5570554).

Greenway (figure 1) shows a method of attaching solid hardwood floor planks (page 2, col 2 lines 24-30) to a concrete surface comprising the step of preparing solid wood floorboards having at least about 3 feet (page 1 col 1 lines 26-29) for attachment to the concrete surface (12)

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and securing the floorboards to the concrete with an adhesive (8), the step of allowing the adhesive to set, the step of providing the floorboards with surface wormholes (6) and colors (inherently so), the step of applying adhesive to the concrete floor surface, preparing the concrete floor surface to be substantially flat, the floorboards being prepared away from the installation site (old and well known to make hardwood flooring at a manufacturing plant), the floorboard being provided with color (inherently so) and wormholes (6), nails (14) can be used in the wormholes (6) to fasten the board to the concrete at "substantially" right angle thereto through the board, the floorboards being prepared with surface features that include at least one of wormholes (6) and scratches, the adhesive is applied to provide an adhesive layer.

Greenway does not show the step of applying the floorboards to the concrete floor surface with at least one water resistant, water impermeable adhesive, and the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards after the step of applying.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses the step of gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the row in place.

Searer shows a hardwood floor plank boards being nailed to the concrete floor surface substantially at right angles thereto through the boards.

Murray discloses an adhesive for mounting tiles to concrete floor (col 8 example 1), the adhesive being water resistant, water impermeable adhesive (col 7 lines 61-63), the adhesive able to fill voids or imperfections between construction material and having a rapid cure time (col 3

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lines 45-49), the adhesive comprising moisture curable polyurethane-based composition, the adhesive comprising a prepolymer including a polyol and an isocyanate.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's method steps to show the step of applying adhesive and nails to secure the floorboard to the substrate as taught by Armstrong, the step of providing an adhesive that is water resistant, water impermeable as taught by Murray, the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Searer because applying nails to a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going substantially at right angles thereto through the boards would further enhance the securing of the floorboards to the concrete as taught by Searer.

Greenway as modified shows all the claimed method steps.

Per claims 14-15, Greenway as modified further shows the adhesive comprising a prepolymer including a polyol and an isocyanate as taught by Murray.

Per claim 17, Greenway as modified shows the claimed method step of nailing nails into the surface features to hide the nails therein.

Per claim 18, Greenway as modified shows the claimed method of nailing the floorboards to the concrete through the adhesive layer.

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Per claim 19, Greenway as modified shows the adhesive being allowed to set after the floorboards are nailed.

Per claim 20, Greenway as modified shows all the claimed method steps including the steps of nailing the boards to the concrete floor surface to hold the boards to the adhesive on the concrete surface as the adhesive sets.

Per claims 3, 10, Greenway as modified shows all the claimed method steps except for the step of preparing the concrete floor surface to be clean, dry, smooth, and low in surface moisture.

Armstrong further discloses the steps of preparing a subfloor surface for gluing, the subfloor surface needs to be clean, dry, smooth, low in surface moisture, and substantially flat before the application of adhesive (see section for "SUBFLOOR REQUIREMENTS").

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's modified method steps to show the step of preparing the concrete floor surface to be clean, dry, smooth, low in surface moisture because it would enable the proper application of adhesive between the floorboards and the subfloor surface as taught by Armstrong.

3. Claims 1-2, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong (NPL), and Murray.

Greenway (figure 1) shows a method of attaching solid hardwood floor planks (page 2, col 2 lines 24-30) to a concrete surface comprising the step of preparing solid wood floorboards having at least about 3 feet (page 1 col 1 lines 26-29) for attachment to the concrete surface (12) and securing the floorboards to the concrete with an adhesive (8), the step of allowing the

adhesive to set, the step of providing the floorboards with surface wormholes (6) and colors, the step of applying adhesive to the concrete floor surface, preparing the concrete floor surface to be substantially flat, the floorboards being prepared away from the installation site (old and well known to make hardwood flooring at a manufacturing plant), the floorboard being provided with color (inherently so) and wormholes (6), nails (14) can be used in the wormholes (6) to fasten the board to the concrete at "substantially" right angle thereto through the board, the floorboards being prepared with surface features that include at least one of wormholes (6) and scratches, the adhesive is applied to provide an adhesive layer.

Greenway (figure 1) does not show the step of applying the floorboards to the concrete floor surface with at least one water resistant, water impermeable adhesive, and the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards after the step of applying.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses the step of gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the row in place.

Murray discloses an adhesive for mounting tiles to concrete floor (col 8 example 1), the adhesive being water resistant, water impermeable adhesive (col 7 lines 61-63), the adhesive able to fill voids or imperfections between construction material and having a rapid cure time (col 3 lines 45-49), the adhesive comprising moisture curable polyurethane-based composition, the adhesive comprising a prepolymer including a polyol and an isocyanate.

Greenway (figure 2) shows nailing the boards to the concrete floor surface substantially at right angles thereto through the boards.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's method steps to show the step of applying adhesive and nails to secure the floorboard to the substrate as taught by Armstrong, the step of providing an adhesive that is water resistant, water impermeable as taught by Murray, the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Greenway (figure 2) because applying nails to a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going substantially at right angles thereto through the boards would enhance the securing of the floorboards to the concrete as taught by Greenway (figure 2).

Greenway as modified shows all the claimed method steps.

Per claims 14-15, Greenway as modified further shows the adhesive comprising a prepolymer including a polyol and an isocyanate as taught by Murray.

Per claim 17, Greenway as modified shows the claimed method step of nailing nails into the surface features to hide the nails therein.

Per claim 18, Greenway as modified shows the claimed method of nailing the floorboards to the concrete through the adhesive layer.

Per claim 19, Greenway as modified shows the adhesive being allowed to set after the floorboards are nailed.

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Per claim 20, Greenway as modified shows all the claimed method steps including the steps of nailing the boards to the concrete floor surface to hold the boards to the adhesive on the concrete surface as the adhesive sets.

Per claims 3, 10, Greenway as modified shows all the claimed method steps except for the step of preparing the concrete floor surface to be clean, dry, smooth, and low in surface moisture.

Armstrong further discloses the steps of preparing a subfloor surface for gluing, the subfloor surface needs to be clean, dry, smooth, low in surface moisture, and substantially flat before the application of adhesive (see section for "SUBFLOOR REQUIREMENTS").

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's modified method steps to show the step of preparing the concrete floor surface to be clean, dry, smooth, low in surface moisture because it would enable the proper application of adhesive between the floorboards and the subfloor surface as taught by Armstrong.

4. Claims 5-7, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong, Murray, and Searer (5570554).

Greenway shows hardwood floor planks (page 2, col 2 lines 24-30, figure 1) of at least about 3 feet (page 1 col 1 lines 26-29) being attached onto a concrete surface and securing it with an adhesive, the floor having varying thickness at the grooves, the floorboard being provided with color and wormholes (6), nails (14) can be used in the wormholes (6), the floorboards are of varying thickness (at the grooves).

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Greenway does not show the adhesive being water resistant, water impermeable adhesive, nails that extend at right angles to the concrete floor surface through the boards, through the adhesive and into the concrete floor surface.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the floorboard in place, the nails going through the board and the adhesive into the concrete floor surface.

Searer shows a hardwood floor plank boards being nailed to the concrete floor surface at right angles thereto through the boards.

Murray discloses a water resistant, water impermeable adhesive (10) securing a flooring surface to a concrete surface.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's structure to show nails going through floorboards and adhesive and into the concrete floor as taught by Armstrong, the adhesive being water resistant, water impermeable as taught by Murray, nails attaching the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Searer because having nails attaching a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and

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having nails going at right angles thereto through the boards would further enhance the securing of the floorboards to the concrete as taught by Searer.

Response to Arguments

5. Applicant's arguments with respect to claims 1-3, 5-7, 10, 12, 14-20 have been considered but are moot in view of the new ground(s) of rejection.

Also, for claims 5-7, 12, the preamble only calls for a "floor", the "applying" and "nailing" features are considered Product by Process limitations.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different concrete and floorboards attaching methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Ph/Dieu Tran A

2/28/07